

FISCHERSCOPE® X-RAY XAN® 500

Mobile X-ray fluorescence instrument for
material analysis and coating thickness measurement



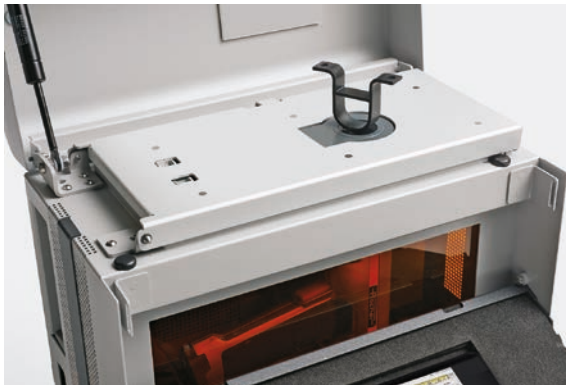
fischer®

One device, so many possibilities

Whenever layers must be measured or materials analysed during quality assurance, for pre-delivery inspection or in the production process – that is when high-precision mobile instruments are required. With the FISCHERSCOPE® X-RAY XAN® 500, FISCHER offers a portable measuring device that employs the X-ray fluorescence method (RFA).

In the XAN® 500, FISCHER applies its long experience in precise coating thickness measurement to industry demands for process and quality control. The X-RAY XAN® 500 enables not only mobile application on large and bulky parts using the handheld unit but also safe and exact measurement of small components inside an optional measurement chamber, like a table-top unit. The measurement chamber also functions as a transport case, allowing for quick removal to a new operation site.

The robust handheld unit was designed for reliable and precise measurements on a wide variety of sample shapes. Its 3-point probe support ensures secure placement of the device, so that coatings and alloys can be measured accurately and reproducibly. To evaluate the measurement data, the XAN® 500 relies on proven WinFTM® software, as do all of FISCHER's X-RAY systems.



Placed into its case, the XAN® 500 becomes a closed table-top instrument – ideal for fast measurements on small items



The portable XAN® 500 is ideal for handheld use on large or bulky items

Besides classic coating thickness measurements, the software also performs analysis of sophisticated, multi-layer systems and alloys. With the fundamental parameter method, it is possible to take measurements without previous calibration – that is, standard-free. The integrated Wi-Fi interface enables easy export, distribution or printing of test results.

The optional measurement chamber case for the X-RAY XAN® 500 is constructed to facilitate simple positioning of smaller objects and thus guarantees reliable test results. Use with the measurement chamber ensures protection from radiation under all circumstances. As needed, the mobile hand unit can be removed easily from the case in order to take measurements on large objects or in places that are difficult to access.



Measurement of decorative coatings, e.g. Cr/Ni/Cu



Material analysis of stainless steel



Analysis of non-ferrous metals such as bronze or brass



Measuring the thickness of Zn/Fe or ZnNi/Fe coatings



Analysis of gold and precious metals

Accurate and precise measurements

The FISCHERSCOPE® X-RAY XAN® 500 makes it possible to take reliable measurements even without standards via the fundamental parameter method. As a DAkkS-accredited institute, FISCHER also offers a broad selection of traceable calibration norms for every measurement task. That includes pure element standards, single and dual-layer standards, as well as complete calibration sets for a variety of applications. The instrument can be adapted to a specific measurement application by calibrating it with these calibration norms.



The practical holder quickly and securely affixes the calibration standards to the device

Features

- Mobile coating thickness measurement or material analysis on large items such as housings, mechanical components or pipes
- Stationary measurement on small parts: with the measurement chamber case, the instrument becomes a table-top unit
- Safe and repeatable measurements due to the stable 3-point support
- Flexible measurement options: calibration either with calibration standards for traceable measurements or using the integrated fundamental parameter method, when no norms exist
- Evaluation and presentation of measurement data on a tablet PC (via Bluetooth) using proven WinFTM® software

Technical Data

- Energy-dispersive X-ray fluorescence (EDXRF)
- Silicon drift detector (SDD) with Peltier cooling
- Tungsten X-ray tubes
- Measurement spot: 3 mm Ø
- Weight of handheld unit: 1.5 kg
- Weight of handheld unit + case + tablet PC: 8.5 kg
- Tablet PC with Windows® operating system
- Measurements according to DIN ISO 3497 and ASTM B 568
- Software: standard WinFTM® BASIC + PDM, optional WinFTM® SUPER



The handheld unit is simply stowed into the measurement chamber case for safe and comfortable table-top use

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